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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/841,081

04/25/2001

Timothy Alderson

017750-700

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02/22/2005

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EXAMINER

COUSO, YON JUNG

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/841,081	Applicant(s) ALDERSON ET AL.	
	Examiner Yon Couso	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-21, 27, 39-49 and 58 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 22-26, 28-30, 50-55, 59, 63 and 65 is/are rejected.
- 7) ☒ Claim(s) 3-10, 31-38, 56, 57, 60-62 and 64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's arguments filed October 4, 2004 have been fully considered but they are not persuasive.

a. The objection made to the specification has been withdrawn.

b. The applicants argue that the Chen does not teach using the methods disclosed in therein to compress a dynamic range of image data as recited in the claim. The examiner notes that Chen teaches compressing a dynamic range of the frame of image data utilizing down-sampling, median filtering, and up-sampling (column 25, line 37-column 26, line 64). Chen discloses compressing image using down-sampling, median filtering, and up-sampling that it is capable of performing DRC utilizing down-sampling, median filtering, and up-sampling in the Chen reference.

c. The applicants argue that the Gonsalves reference does not disclose approximating a resultant gaussian function. The examiner disagrees. Gonsalves teaches a method and an apparatus of approximating a gaussian-blur filter, the method comprising: applying a first box filter having a first kernel size to a group of pixels of a frame of image data (84 in figure 6); and applying a second box filter having a second kernel size to the group pixels, wherein first kernel coefficients for the first box filter and second kernel coefficients for the second box filter are configured to approximate a resultant gaussian function (86 in figure 6 and column 2, lines 9-18).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 26, 29, 30, 54, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (US Patent No. 5,949,919).

As per claims 1, 26, 29, and 54, Chen teaches a method of processing image data, the method comprising the steps of: acquiring a frame of image data and compressing a dynamic range of the frame of image data using a dynamic range of compression algorithm that utilizes down-sampling, median filtering, and up-sampling (column 25, line 37-column 26, line 64).

As per claims 2, 30, and 55, Chen teaches normalizing the frame of image data prior to the step of compressing dynamic range (502 in figure 19A).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US Patent No. 5,949,919).

The arguments advanced in paragraph 2 above as to the applicability of the reference are incorporated herein.

As per claims 63 and 65, Chen does not teach applying down-sampling, median filtering, and up-sampling in that order. However, Chen is directed to compressing the image data using down-sampling, median filtering, and up-sampling as required in the

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claim. It would have been obvious to one of ordinary skills in the art, given the reference at the time the invention was made, to make the modification. It lacks any criticality without specifying how the ordering of down-sampling, median filtering, and up-sampling would benefit or enhance the system.

4. Claims 22, 23, 28, 50, 51, and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonsalves et al (US Patent No. 6,269,195).

As per claims 22, 28, 50, and 51, Gonsalves teaches a method and an apparatus of approximating a gaussian-blur filter, the method comprising: applying a first box filter having a first kernel size to a group of pixels of a frame of image data (84 in figure 6); and applying a second box filter having a second kernel size to the group pixels, wherein first kernel coefficients for the first box filter and second kernel coefficients for the second box filter are configured to approximate a resultant gaussian function (86 in figure 6 and column 2, lines 9-18).

As per claims 23 and 51, Gonsalves teaches that the second kernel size is greater than or equal to the first kernel size (column 7, lines 54-57).

5. Claims 24, 25, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonsalves et al.

The arguments advanced in paragraph 3 above as to the applicability of the reference are incorporated herein.

As per claims 24, 25, 52, and 53, the shape of box filter being symmetric and/or asymmetric would have been a matter of design choice for one of ordinary skill in the art. As evidenced by the Gonsalves reference, box filter can be configured to 3X3

(symmetric) or 3X1 (asymmetric) (column 2, lines 9-18) It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to apply symmetric and/or asymmetric box filters so that the system would be configured to approximate a resultant gaussian function (86 in figure 6 and column 2, lines 9-18).

6. Claims 3-10, 31-38, 56-57, 60-61, 62, and 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 11-21, 27, 39-49, and 58 are allowed.

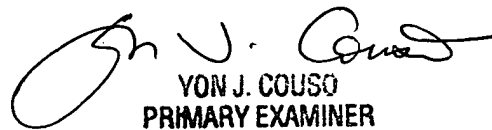
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (703) 305-4779. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



YON J. COUSO
PRIMARY EXAMINER

YJC

February 18, 2005